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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/346,256	07/01/1999	MAMORU SATO	B208-1038	2193
26272	7590	04/26/2004	EXAMINER	
ROBIN BLECKER & DALEY 2ND FLOOR 330 MADISON AVENUE NEW YORK, NY 10017			WU, DOROTHY	
			ART UNIT	PAPER NUMBER
			2615	

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/346,256

Applicant(s)

SATO ET AL.

Examiner

Eric D Wisdahl

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1 – 8 and 12 – 20 have been considered but are moot in view of the new ground(s) of rejection.

The examiner notes, however, applicant's arguments that Lassiter's control system 202 is used to change the filming direction and position and, therefore, the panorama scene 201. Furthermore, applicant states that nothing is taught or suggested in Lassiter as to the designation of the control scene 202 being used to generate a frame image from the panorama scene 201 to be displayed with the panorama scene.

The examiner respectfully disagrees with these assertions. It is seen that Lassiter discloses two scenarios, one in which the display of the target scene is implemented so that the area of view encompassed by the target scene remains constant (i.e. would not move the target scene as asserted by the applicant), and the other in which the area of view encompassed by the target scene can move, so as to move the area of view of the target scene when the target scene reaches a predefined location near a boundary (Column 13 lines 56 – 61, also the basis for the embodiment which the applicant is basing the argument in which there appears a control scene, a target scene and a panoramic scene, the panoramic scene moving within the target scene as dictated by the control scene).

It is noted that the terminology used is a bit counter-intuitive as the term control scene is actually the high-definition scene being filmed and the target scene is the overall area from which the control scene is to be related to. (i.e. the target space provides context for the overlapping portions of the control space Column 4 lines 63 – 65).

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Both the control scene and the target scene are simultaneously displayed in the Lassiter user interface. This is shown in Figures 2 and 5. Furthermore, it is noted that in such a display, the area marking the control scene is distinguished from the target scene by a rectangular border so as to allow the user an easy reference for visualization of the high quality scene being filmed as compared to the scene from which it is encompassed by (i.e. the “outline of the control scene” Column 17 line 44 – Column 18 line 2).

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 – 4, 8, 12 – 15, 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Lassiter (U.S. Patent 6, 624, 846).

Regarding Claim 1, Lassiter discloses a camera control system comprising:

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- first image pickup means for picking up an image of an object through a wide-angle lens having distortion, to output a moving image (Column 16 lines 30 – 40);
- image processing means for performing projective transformation processing to correct distortion of the moving image outputted from said first image pickup means (Column 16 lines 30 – 40);
- second image pickup means having no distortion, for outputting a moving image (Column 5 lines 18 – 57, Column 7 line 7 – Column 8 line 19);
- display means for displaying the moving image processed by said image processing means, and for superimposing and displaying, on the displayed moving image, a rectangular frame indicative of an image-pickup area of said second image pickup means, and displays the moving image from said second image pickup device together with the processed moving image and the rectangular frame (Figures 5, Column 4 lines 63 – 65, Column 7 line 7 – Column 8 line 19, Column 17 line 44 – Column 18 line 2 “outline of the control scene”);
- designating means for designating a desired rectangular area within the moving image displayed by said display means (Figures 5, 6 and 8, Column 16 line 41 – Column 18 line 2); and
- control means for controlling at least one of panning, tilting and zooming of said second image pickup means in such a way as to pick up an image corresponding to the rectangular area designated by said designating means (Column 9 lines 27 – 36, Column 16 line 30 – Column 18 line 2);

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- Wherein a frame image included in the processed moving image of the first image pickup device to be displayed by said display device is generated in response to the desired rectangular area is generated in response that the desired rectangular area is designated by the designating device (Column 7 lines 27 – 38, Column 17 line 8 – Column 18 line 2).

Regarding Claim 2, Lassiter discloses a camera control system according to claim 1, wherein:

- said display means displays, on a common screen, the moving image processed by said image processing means and the moving image outputted from said second image pickup means (Column 10 line 43 – Column 11 line 3).

Regarding Claim 3, Lassiter discloses A camera control system according to claim 1, wherein:

- a position and a size of the rectangular frame displayed by said display means are determined on the basis of a parameter outputted from said second image pickup means (Column 17 line 44 – Column 18 line 2, “constraints imposed by the video device”).

Regarding Claim 4, Lassiter discloses A camera control system according to claim 1, further comprising:

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- frame rate control means for making a frame rate of the moving image outputted from said second image pickup means higher than a frame rate of the moving image processed by said image processing means, before the moving images are outputted to said display means (Column 13 lines 8 – 32).

Regarding Claim 8, Lassiter discloses a camera control system according to claim 1, wherein:

- said wide-angle lens having distortion for use with said first image pickup means is a fisheye lens (Column 16 lines 30 – 40).

Regarding Claim 12, see examiners notes claim 1.

Regarding Claim 13, see examiners notes claim 2.

Regarding Claim 14, see examiners notes claim 3.

Regarding Claim 15, see examiners notes claim 4.

Regarding Claim 19, see examiners notes claim 8.

Regarding Claim 20, see examiners notes claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lassiter (U.S. Patent 6, 624, 846) in view of Driscoll, jr. et al. (U.S. Patent 6, 593, 969)

Regarding Claim 5, Lassiter discloses a camera control system according to claim 1, wherein:

- said first image pickup means includes a plurality of image pickup means, and said image processing means processes and combines moving images outputted from said plurality of image pickup means into one moving image (Column 11 line 66 – Column 12 line 40).

However, Lassiter fails to disclose the situation wherein:

- said first image pickup means includes a plurality of image pickup means, and said image processing means processes and combines moving images outputted from said plurality of image pickup means into one moving image **with a wide angle lens** as is necessary in the first image pickup means.

Driscoll, jr. teaches:

- said first image pickup means includes a plurality of image pickup means, and said image processing means processes and combines moving images outputted from said plurality of image pickup means into one moving image **with a wide angle lens** (Figure 5).

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Such an arrangement would be advantageous in providing an image of sufficient resolution to enable the camera operator to reliably decipher the portions of the target scene to be captured by the control scene, or non-distorted camera.

Therefore, it would have been obvious to one of ordinary skill in the art to include the said first image pickup means includes a plurality of image pickup means, and said image processing means processes and combines moving images outputted from said plurality of image pickup means into one moving image with a wide angle lens so as to provide an image of higher resolution.

Regarding Claim 16, see examiners notes claim 5.

Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lassiter (U.S. Patent 6, 624, 846).

Regarding Claim 6, Lassiter fails to disclose a camera control system according to claim 1, further comprising:

- an optical member for making object light incident thereon; and
- an optical splitting member for splitting the object light coming through said optical member into two light beams and for making the two split light beams incident on said first image pickup means and said second image pickup means, respectively, so that image-pickup optical axes of said first image pickup means and said second image pickup means coincide with each other.

Official Notice, it is well known to use:

- an optical member for making object light incident thereon; and

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- an optical splitting member for splitting the object light coming through said optical member into two light beams and for making the two split light beams incident on said first image pickup means, with its own optical system, and said second image pickup means, also with its own optical system, respectively, so that image-pickup optical axes of said first image pickup means and said second image pickup means coincide with each other.

Such an arrangement would be advantageous in obtaining the wide-angle image taken through the first image pickup means and the “normal” image, or non-distorted image, taken through the second image pickup means at the same optical axis allowing the match up between the two images to be identical providing the user correct control over the second image pickup means.

Therefore, it would have been obvious to one of ordinary skill in the art to provide an optical member for making object light incident thereon and an optical splitting member for splitting the object light coming through said optical member into two light beams and for making the two split light beams incident on said first image pickup means, with its own optical system, and said second image pickup means, also with its own optical system, respectively, so that image-pickup optical axes of said first image pickup means and said second image pickup means coincide with each other so as to allow the user precise control over the system in which both images are obtained on the same optical axis.

Regarding Claim 17, see examiners notes claim 6.

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Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lassiter (U.S. Patent 6, 624, 846) in view of Busko et al. (U.S. Patent 5, 903, 319).

Regarding Claim 7, Lassiter fails to specifically disclose a camera control system according to claim 1, wherein:

- said image processing means executes an affine transformation on the basis of information on an image-pickup direction of said first image pickup means.

Busko teaches:

- said image processing means executes an affine transformation on the basis of information on an image-pickup direction of said first image pickup means (Column 1 lines 13 – 24, 46 – 55, furthermore, affine transformations for correcting distortion in images acquired by a wide angle lens are well known in the art).

Such a practice of using an affine transformation to remove the distortion from the first image pickup means is a well known method of allowing a user to view the image “normally” or without the distortion inherent to an image picked up by a wide-angle lens.

Therefore, it would have been obvious to one of ordinary skill in the art to include the image processing means executes an affine transformation on the basis of information on an image-pickup direction of said first image pickup means so as to allow the user to view the image normally.

Regarding Claim 18, see examiners notes claim 7.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ^{Dorothy Wu}~~Eric D. Wisdahl~~ whose telephone number is (703) 305-⁸⁴¹²~~4915~~. The examiner can normally be reached on 9:00 - 6:00 Mon-Thur every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edw



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